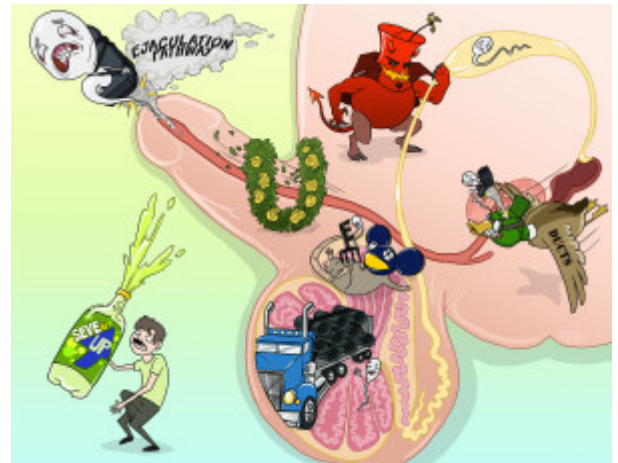


Ejaculation Pathway

The ejaculation pathway of sperm follows the acronym SEVEN UP, representing the **S**eminiferous tubules, **E**pididymis, **V**as deferens, **E**jaculatory ducts, **n**othing, **U**rethra and **P**enis. This pathway begins with spermatogenesis in the seminiferous tubules, transport through fluid gradients in the epididymis, peristalsis in the vas deferens, and expulsion in the ejaculatory ducts. At this point nutrients are added to the semen before it makes its way through the urethra and penis before becoming ejaculate.



PLAY PICMONIC

SEVEN UP

SEVEN UP-arrow Soda

SEVEN UP is an acronym used to remember the ejaculation pathway of sperm. This represents the Seminiferous tubules, Epididymis, Vas deferens, Ejaculatory ducts, nothing, Urethra and Penis.

Seminiferous Tubules

Semi-tubes

The seminiferous tubules are large tubules in the testes which are lined by tall, columnar cells called Sertoli cells. Between these Sertoli cells, spermatogenic cells differentiate via meiosis to become sperm (haploid gametes).

Epididymis

E-pick-dead-mouse

The epididymis is a tightly coiled tube which sits above the testicle. It connects from the seminiferous tubules to the vas deferens. When ejaculation first occurs, sperm are not fully motile, and transport is propagated in the the seminiferous tubules with a large volume of fluid. The epididymis is lined with stereocilia, which absorb large amounts of fluid and further help sperm travel on the ejaculation pathway to the vas deferens.

Vas Deferens

Vase Devil

When ejaculation occurs, the smooth muscle in the walls of the vas deferens contracts reflexively, working to propel the sperm forward. This is also known as peristalsis.

Ejaculatory Ducts

Ejecting Ducks

The ejaculatory duct is formed by the union of the vas deferens with the duct of the seminal vesicle. Semen is trapped in this duct, and its contents are expelled in the expulsion stage, through contractions at the base of the penis.

Urethra

U-wreath

After being expelled from the ejaculatory ducts and other glands, semen makes its way to the urethra. From the ejaculatory ducts seminal fluid continues down the ejaculatory duct into the prostate gland, where an alkaline prostatic fluid is added. The alkalinity of the prostatic fluid serves to neutralize the acidity of the female vaginal tract in order to prolong the survival of sperm in this harsh environment. Semen becomes a fructose-rich, alkaline fluid containing sperm as it enters the bulbourethral glands and then to the urethra.

Penis

Penis

The final stage of the ejaculatory pathway is the penis. Which expels semen in spurts, due to the movement of the muscles propelling it. These muscle contractions are related to the sensations of orgasm for the male.